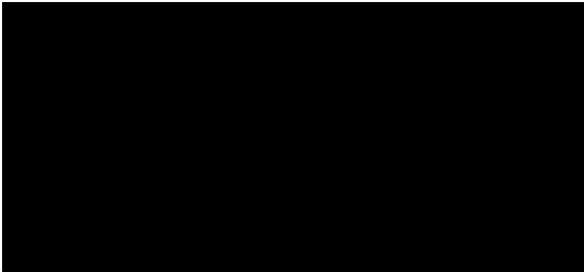


12 May 1958

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In response to your letter [redacted], dated 7 May 1958, I am enclosing a statement prepared by ORR's Materials Division on the defense industry consumption of copper and nickel in the Sino-Soviet Bloc. This represents our latest information and is our most up-to-date estimate.

The report on Material Balances to which you refer in paragraph two of your letter was a theoretical study prepared by one of our analysts sometime ago. It has not been reissued nor do we have any plans for up-dating it.

*Sincerely,*

25X1A9a



Enclosure:

Defense Industry Consumption of  
Copper and Nickel (2 copies)

Distribution:

Original and 1 - Addressee

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~~SECRET~~

12 May 1958

# Defense Industry Consumption of Copper and Nickel

1. ORR estimates direct military consumption of copper in the Sino-Soviet Bloc was 120,000 metric tons in 1956. ORR estimates that direct military consumption of copper was about the same in 1957. ORR believes that direct military consumption of copper understates the role of copper in the Bloc's military programs; e.g., large quantities of copper are used for communications facilities.

2. ORR believes that if the Bloc were to mobilize, total military requirements would be 355,000 tons or some 70 percent of total indigenous supply. This is so large a proportion of the available supply that it is inconceivable that the whole amount could be diverted from general industrial uses. Some of the military requirements obviously would have to go unfilled.

3. Information on the direct military consumption of nickel in the USSR is not available. Inasmuch as nickel enters into consumption principally via the steel industry, its demand is closely related to the production of steel. On the basis of the availability of nickel in 1956, the Sino-Soviet Bloc had only 1.2 pounds of nickel per ton of steel produced. In the Free World, there were 2.0 pounds of nickel per ton of steel produced, and in the US 2.2 pounds per ton.

4. Ruble-dollar ratios and numerous reports of Bloc attempts to smuggle nickel from the Free World suggest that nickel is in tight supply in the USSR. The ruble-dollar ratio for steel mill products in the USSR is 6 to 1, but the ratio for nickel is 16 to 1. Nickel has been smuggled into the Bloc by concealment of the shipment under a non-strategic item (i.e. vegetables) or by concealment in compartments of trucks or automobiles, among other techniques. The goods were then smuggled across various border points for transshipment to the Bloc via non-Bloc countries to the Soviet Zone of Germany. It is estimated that other diversions in 1956 and 1957 included some 90 tons of nickel.

5. On the basis of these data, it is concluded that the Bloc is short of nickel, and that all consumers including the military, are forced to manage with minimum supplies. Any increases in the availability of nickel probably would permit greater use of nickel in military end items.